

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for the removal of one or more metal impurities in chloride-based copper recovery processes, comprising:
contacting an aqueous strong chloride solution of comprising monovalent copper and one or more metal impurities with a chelating ion-exchange resin under conditions that bind one or more metal impurities to said chelating ion-exchange resin, and that do not bind at least some of said monovalent copper to said chelating ion-exchange resin, thereby forming a bound chelating ion-exchange resin and a metal impurity depleted aqueous strong chloride solution comprising monovalent copper; and removing the metal impurities from said solution using said chelating ion-exchange resin
separating said bound chelating ion-exchange resin from said metal impurity depleted aqueous strong chloride solution comprising monovalent copper.
2. (Currently Amended) A method according to claim 1, wherein the chelating ion-exchange resin has is a styrene-divinyl-benzene matrix ring structure in the ion-exchange resin.
3. (Currently Amended) A method according to claim 1, wherein the chelating ion-exchange resin contains an functional group of the ion-exchange resin is the iminodiacetic acid functional group.
4. (Currently Amended) A method according to claim 1, wherein the chelating ion-exchange resin contains an functional group of the ion-exchange resin is the aminophosphonic functional group.

5. (Currently Amended) A method according to claim 1, wherein the one or more metal impurity impurities contain is zinc, nickel, lead, iron, or manganese, or combinations of these.

6. (Canceled)

7. (Canceled)

8. (Currently Amended) A method according to claim 1, wherein the removal of metal impurities is carried out contacting occurs in an acidic environment.

9. (Currently Amended) A method according to claim 1, wherein the removal of metal impurities is carried out contacting occurs in a neutral environment.

10. (Currently Amended) A method according to claim 1, wherein the copper-containing chloride solution that is the mother liquor in the resin is displaced before elution with an NaCl solution and that the alkaline solution to be used for regenerating the resin is displaced with an NaCl solution before the copper-containing chloride solution is fed into the resin further comprising:

displacing a residual metal impurity depleted aqueous strong chloride solution comprising monovalent copper from the bound chelating ion-exchange resin by contacting the bound chelating ion-exchange resin with an NaCl solution;

eluting said one or more metal impurities from the bound chelating ion-exchange resin to form an eluted chelating ion-exchange resin;

regenerating the eluted chelating ion-exchange resin by contacting it with an alkaline solution; and

displacing the alkaline solution from the chelating ion-exchange resin with an NaCl solution before contacting the chelating ion-exchange resin with an aqueous strong chloride solution comprising monovalent copper and one or more metal impurities.

11. (Currently Amended) A method according to claim 1, further comprising removing wherein the majority of the one or more metal impurities in the strong chloride solution of monovalent copper are removed by hydroxide precipitation and the rest by using prior to the contacting with the chelating ion ion-exchange resin.

12. (Currently Amended) A method according to claim 11, wherein the hydroxide precipitation removes said one or more metal impurities are removed by hydroxide precipitation to a content of 0.1 - 1 g/l, after which the final purification is made using ion exchange.

13. (Currently Amended) A method according to claim 1, wherein said one or more metal impurities are removed from said aqueous strong chloride solution comprising monovalent copper and one or more metal impurities solution at least to at least a level that corresponds to cathode copper LME-A grade impurity level.

14. (Currently Amended) A method according to claim 1, wherein said aqueous strong chloride solution comprising monovalent copper and one or more metal impurities has an the alkali chloride content of said strong chloride solution is at least 200 g/l.

15. (Currently Amended) A method according to claim 1, wherein said aqueous strong chloride solution comprising monovalent copper and one or more metal impurities has a monovalent copper content of said strong chloride solution is 30 - 100 g/l.